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EMENT BOOK

Dimensions			Contents	Reference to last Measurement
Length 4	Breadth 5	Depth 6	7	8

BILL NO 2 Part Bill

PWD Work 0147-16-000004 P-1077
P.S.No 822/DD/S3/1516 dt 4-1-2016

M. A. R. 57 (Rule 116) Sec Rly
Measurement Book **No. B 415221**

Serial No. .....
Name of Work Construction and Repairs to Culverts in Bagalagunte W.W.14
Name of Contractor or nature of Agency N. Shivananda - Km 25 - 24 Cum Attende Coly.
Date of commencement of work W.W.: 822/DD/31/15-16 dt 24-3-2016

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
1	Earth work Excavation by manual means in ordinary Common soil (Except 2 nos road cross cut pipe culvert) Soil obtained from Excavation of Side drain level & Soil nearby the structure & Soil obtained nearby trench / Cholly Cement as per Specification Item present received vide PWD 41528/1/1 dt 5-1-16				0.80 m/a	123.75 Cum	9900/-
2	Providing and laying in position RCC M 20 grade 1:1½:3 with 40mm nominal size granite gravel coarse aggregate and fine aggregate conforming to IS 383 in all proportion including curing complete as per Specification and direction of Engineer in charge					1.85 Cum	0.85 cum

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MEASUREMENT BOOK

M. A. R. 57
Measuren

Serial No. .....
Name of Work ..... From.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Cost of all materials labour etc present rate as per			4153812		18.56 Cum	87232/-
				~~0.1857~~			
				0.47814			
3	Construction of providing & erecting Granite Stone Stone masonry in foundation in cement mortar 1:6 Stone hammer dressed in courses not exceeding 20 cm thick bed stones at 2m apart in each course including cost of all materials labour charges including WCT all taxes labour charges complete						
	28th Cm Regulating	2	6.50	~~2.70~~	0.60	5.46	
	2nd Cm Base ready bed	2	~~6.00~~	0.70	0.60	6.72	
	8th Cm Retaining Wall	2	6.00	0.70	0.60	5.04	
	5th Cm main Retaining wall	2	7.00	~~0.70~~	~~0.60~~	5.88	
	1st Main Mantinatta wayno	2	6.50	0.70	0.60	5.46	

Date	Full description, etc, of work	Number	Len
1	2	3	4
	Vijaya Stone School near Mantinatta wayno Bolder near by Brindavan Lakeside	2	6
		2	6
		2	6
		2	5
		2	6
		2	8
		2	6
		2	7
		2	6
		2	6
		2	5
		2	5

21/6/18.

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REMENT BOOK

Dimensions			Contents	Reference to last Measurement
Length 4	Breadth 5	Depth 6	7	8
Pro	41538 1/2		18.56 cu	
	~~0.1856~~			87232/-
	0.47			
with Size Stone masonry in foundation and dressed in Cement mortar including supply of Sand Cutting Curing complete all leads Labour charges				
6.50	~~2.70~~ 0.70	0.60	5.46	
~~5~~.00	0.70	0.60	6.72	
6.00	0.70	0.60	5.04	
7.00	~~2.70~~ 0.70	~~0.60~~ 0.60	5.88	
6.50	0.70	0.60	5.46	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 415222

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	Vijaya Stone School near Mantravalla Wayside Bridge near Bridge Abutment wall	2	6.00	0.70	0.60	5.04	
		2	~~5.50~~ 6.50	0.70	0.60	4.62	
		2	5.50	0.70	0.60	4.62	
		2	5.25	0.70	0.60	4.41	
		2	6.50	0.45	0.45	2.63	
		2	8.00	0.45	0.45	3.24	
		2	6.00	0.45	0.45	2.43	
		2	7.00	0.45	0.45	2.83	
		2	6.50	0.45	0.45	2.63	
		2	6.00	0.45	0.45	2.63	
		2	5.50	0.45	0.45	2.22	
		2	5.50	0.45	0.45	2.22	
		2	5.25	0.45	0.45	2.12	25911/-
						70.03 cu	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
4	Providing raised pointing to Cement Concrete work 1:3:6 20 mm deep after raking joints to depth of 20 mm including curing including cost of materials labour & all charges						
		2	6.50	0.60	—	7.80	
		2	8.00	0.60	—	9.60	
		2	6.00	0.60	—	7.20	
		2	7.00	0.60	—	8.40	
		2	6.50	0.60	—	7.80	
		2	6.00	0.60	—	7.20	
		2	5.50	0.60	—	6.60	
		2	5.50	0.60	—	6.60	
		2	5.25	0.60	—	6.30	6070/-
						67.50 sqm	
						@ 90.00/sq	

M. A. R
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Serial No. .....
Name of Work ..... From....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	Number
1	2	3
5	Providing and rendering of thin cover for vertical surface plaster brushing & striping cement	

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REMENT BOOK

Dimensions			Contents	Reference to last Measurement
Length 4	Breadth 5	Depth 6	7	8
Course of Stone masonry with Local				
Rendering Joints to depth of 20 mm				
with water proof Cement Mortar				
6.50	0.60	—	7.80	
8.00	0.60	—	9.60	
6.00	0.60	—	7.20	
7.00	0.60	—	8.40	
6.50	0.60	—	7.80	
6.00	0.60	—	7.20	
5.50	0.60	—	6.60	
5.50	0.60	—	6.60	
5.25	0.60	—	6.30	6030/-
@ 30.00/Cft			67.50 Cft	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 415223

Serial No. .....

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
5	Providing and rendering Cement Stone masonry Stone masonry providing & laying RR masonry in the inner face vertical surface with cement mortar 1:6 (1 cement 6 coarse sand) with 20 mm thick & Stone chips 6 mm gauge all around the face	1	6.50	1.00	—	6.50	
		1	8.00	1.00	—	8.00	
		1	6.00	1.00	—	6.00	
		1	7.00	1.00	—	7.00	
		1	6.50	1.00	—	6.50	
		1	6.00	1.00	—	6.00	
		1	5.50	1.00	—	5.50	
		1	5.50	1.00	—	5.50	
		1	5.50	1.00	—	5.50	
		1	5.25	1.00	—	5.25	16875/-
		@300/Cft				56.25 Cft	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
6	providing and laying in position pre-cast cement concrete 1:3:6 mix of 20 mm nominal size aggregate 0.220 kg/sqm with 20 mm nominal size aggregate 0.84 cum and fine aggregate 0.456 cum including curing complete as per drawing and direction of Engineer-in-charge.						
		2	6.50	0.45	0.10	0.58	
		2	8.00	0.45	0.10	0.72	
		2	6.00	0.45	0.10	0.54	
		2	7.00	0.45	0.10	0.63	
		2	6.50	0.45	0.10	0.58	
		2	6.00	0.45	0.10	0.54	
		2	5.50	0.45	0.10	0.49	
		2	5.50	0.45	0.10	0.49	
		2	5.25	0.45	0.10	0.47	
						8.06 cum	2881
				0.5300	MT/Cum		

Ex 21/6.

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Serial No. .....
Name of Work ..... From.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	Number	Le
1	2	3	
7	providing and laying in position p.c.c. and RS graded granite metal aggregate 0.0455 cum including 15 cm thick wall capping in two	1	6
	Deep Stg	1	8
		1	6
		1	7
		1	
		1	8
		1	
		1	
		1	
	Approach Stg	2	6

Ex 21/6

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EMENT BOOK

Dimensions			Contents	Reference to last Measurement
Length 4	Breadth 5	Depth 6	7	8
Prec Cy	Wall 1-3-6 and opc Cond			
Ready	Both sides cover aggregate			
& 0.05 Clear	Mortar cover Cond			
Sur Wall	Cyclone of Foundn			
Ready				
6.50	0.45	0.10	0.58	
8.00	0.45	0.10	0.72	
6.00	0.45	0.10	0.54	
7.00	0.45	0.10	0.63	
6.50	0.45	0.10	0.58	
6.00	0.45	0.10	0.54	
5.50	0.45	0.10	0.49	
5.50	0.45	0.10	0.49	
5.25	0.45	0.10	0.47	
			8.06 cum	28887
	0.5300	cum		

M. A. R. 57 (Rule 116)
Measurement Book

No. B 415224

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Dimensions Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
7	Providing and laying in position P.C.C. 1:2:4 mix using 1:2:4 Kutta Coarse aggregates 0.05 cum and fine aggregates 0.055 cum washing where ever Cement Concrete laid in layers not exceeding 20 cm in thickness and finishing the top surface of 15 cm thick wall Cyclone in foundation and plinth						
	Sleeve Slab	1	6.50	1.90	0.30	3.70	
		1	8.00	1.90	0.30	4.56	
		1	6.00	1.90	0.30	3.42	
		1	7.00	1.90	0.30	3.99	
		1	6.50	1.90	0.30	3.70	
		1	8.00	1.90	0.30	3.42	
		1	5.50	1.90	0.30	3.13	
		1	5.50	1.90	0.30	3.13	
		1	5.25	1.90	0.30	2.99	
	Approach Slab	2	6.50	1.90	0.30	3.70	

MEASUREMENT BOOK

M. A. R. 57
Measurem

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	B 21/6/12.	2	8-00	1-00	0-30	4-80	
		2	6-00	1-00	0-30	3-60	
		2	7-00	1-00	0-30	4-20	
		2	6-50	1-00	0-30	3-90	
		2	6-00	1-00	0-30	3-60	
		2	5-50	1-00	0-30	3-30	
		2	5-50	1-00	0-30	3-30	32905/-
		2	5-25	1-00	0-30	3-15	
						65.81 Cu	
8	Providing T.M.T. Steel reinforcement for RCC small pipe culvert including bending, hooking, placing in position, tapping, making wire rounds, lapping wire ends, making holes and fixing wire allowing wastage, cutting as per design etc complete as per Drg No 415282 & 415283 @ 61050/- MT					5.21 MT	321733/-
	6						

erial No. .....
lame of Work ..... From.....
lame of Contractor of nature of Agency .....
ate of commencement of work .....

Date	Full description, etc, of work	Number	Leng
1	2	3	4
9	Disposal of debris after final plinth level as directed by the Superintendent of Works 5 No @		
	Certificate		
	1) Certified that Sanitary Inspector		
	2) There are no objection		
	3) Certificate has been taken all		
		5	

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REMENT BOOK

Dimensions			Contents	Reference to last Measurement
Length 4	Breadth 5	Depth 6	7	8
8-00	1-00	0-30	4.80	
6-00	1-00	0-30	3.60	
7-00	1-00	0-30	4.20	
6-50	1-00	0-30	3.90	
6-00	1-00	0-30	3.60	
5-50	1-00	0-30	3.30	
5-50	1-00	0-30	3.30	
5-25	1-00	0-30	3.15	32905/-
			65.81 Cu	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 415225

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date 1	Full description, etc, of work 2	Number 3	Dimensions Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
9	Disposal of debris to the final place of disposal with all contingencies as directed by the Engineer in charge including loading unloading etc complete as per Schedule of rates item No 1					123.75 Cu	10149/-
			0.82 Wt/Cu				
	Certificate					Total —	1066942
	1) Certified that the rates charged are as per Schedule of rates item No 1						
	2) There are no delayed portions due to the Contractor						
	3) Contractor has done all deductions towards						
	A.E.					A.E.	
						20/6/16	
			24/6/16.				

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ASUREMENT BOOK

Dimensions				Contents	Reference to last Measurement
Number	Length	Breadth	Depth		
3	4	5	6	7	8
1	45-00	1·80	0·15	12·15	
1	50·00	1·80	0·15	13·50	
1	60·00	1·80	0·15	16·20	
1	20·00	1·80	0·15	5·40	
1	22·00	1·80	0·15	5·94	
1	13·00	1·80	0·15	3·51	
				56·70 Cu	

JOB CNO 014-16-000004
Set 12 Nos Pkt 1737

M. A. R. 57 (Rule 116)
Measurement Book

No. B 415281

Serial No. .....
Name of Work ..... Construction of Repairs to Culverts in Bogalagunta W NO. 14.
Name of Contractor or nature of Agency ..... M. Shivananda, NO 35, 2nd Cross, Old Hanumanthaiah Colony, Bogalguntha
Date of commencement of work ...CWO No: E.O.I.D.D/ 31/15-16 dt 24.3.2016.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Earth work excavation by manual means in ordinary soil in ordinary compact condition upto 2 mts and average upto 0·50 m. Excavated earth used for filling behind abutment & wing walls & the surplus earth is carried away and disposed as directed by Engineer.	1	6·50	2·20	0·60	~~12·35~~ 14·30	
		1	8·00	2·20	1·00	~~15·20~~ 17·60	
		1	6·00	2·20	1·00	~~11·40~~ 13·20	
		1	7·00	2·20	1·00	~~13·30~~ 15·40	
		1	6·50	2·20	1·00	~~12·35~~ 14·30	
		1	8·00	2·20	1·00	~~15·20~~ 17·60	
		1	5·50	2·20	1·00	~~10·45~~ 12·10	
		1	5·50	2·20	1·00	~~10·45~~ 12·10	
		1	5·25	2·20	1·00	~~9·97~~ 11·55	
						123·75 Cu	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
2	providing and laying in position pre cast M 150 grade concrete 1:1½:3 using 10 mm nominal size graded stone aggregate including all lead, lift, conveyance, loading, unloading, stacking, storing, all taxes, octroi, royalty, etc., but excluding the cost of centering, shuttering and reinforcement for the following items of work:						
		1	6.50	2.20	0.15	2.14	
		1	8.00	2.20	0.15	2.64	
		1	6.00	2.20	0.15	1.98	
		1	7.00	2.20	0.15	2.31	
		1	6.50	2.20	0.15	2.14	
		1	8.00	2.20	0.15	2.64	
		1	5.50	2.20	0.15	1.81	
		1	5.50	2.20	0.15	1.81	
		1	5.25	2.20	0.15	1.73	
						18.56 cum	
						30/4/96	

M. A. R. 57 (Rule
Measurement B

al No. .....
ne of Work ..... From.....
ne of Contractor of nature of Agency .....
e of commencement of work .....

te	Full description, etc, of work	Dimen		
		Number	Length	B
	2	3	4	
8	providing TMT steel reinforcement for RCC slabs in position including cutting, bending, welding wherever required, binding with 18 gauge annealed soft iron wire, including all taxes, octroi, royalty, etc., but excluding the cost of centering, shuttering and concrete (measured separately)			
	Deck I			
	ϕ16 mm cranked	27	4.35	
	ϕ16 mm straight	27	3.50	
	ϕ16 mm distribution bars	32	6.50	
	Deck II			
	ϕ16 mm cranked	33	4.35	
	ϕ16 mm straight	33	3.50	

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ASUREMENT BOOK

	Dimensions			Contents	Reference to last Measurement
	Number 3	Length 4	Breadth 5	Depth 6	7	8
	1	6.50	2.20	0.15	2.14	
	1	8.00	2.20	0.15	2.64	
	1	6.00	2.20	0.15	1.98	
	1	7.00	2.20	0.15	2.31	
	1	6.50	2.20	0.15	2.14	
	1	8.00	2.20	0.15	2.64	
	1	5.50	2.20	0.15	1.81	
	1	5.50	2.20	0.15	1.81	
	1	5.25	2.20	0.15	1.73	
					18.56	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 415282

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work 2	Dimensions Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	8 providing TMT Steel reinforcement for RCC work including bending & placing in position lapping & welding where necessary type with binding wire & enclosing bills ordinary mesh & shall not be measured & paid all complete as per drawings & instructions of Engineer-in-charge						
	Deck I						
	ϕ16mm Cranked	27	4.35	117.45	1.58	185.57	
	ϕ16mm Straight	27	3.50	105.30	1.58	166.37	
	ϕ16mm Straight Stirrups	32	6.50	208.00	1.58	328.64	
	Deck II						
	ϕ16mm Cranked	33	4.35	143.55	1.58	226.80	
	ϕ16mm Straight	33	3.50	128.70	1.58	203.34	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	ϕ16m dia bars	32	8.00	256.00	1.58	404.48	
	Deck 3						
	ϕ16m cr ms	25	4.35	108.75	1.58	171.82	
	ϕ16m St ms	25	3.90	97.50	1.58	154.05	
	ϕ16m distribution ms	32	6.00	192.00	1.58	303.36	
	Deck 4						
	ϕ16m Cantilever ms	25	4.35	126.15	1.58	199.31	
	ϕ16m St ms	25	3.90	113.10	1.58	178.69	
	ϕ16m distribution	32	7.00	224.00	1.58	353.92	
	Deck 5						
	ϕ16m Cantilever ms	27	4.35	117.45	1.58	185.57	
	ϕ16m St ms	27	3.90	105.30	1.58	166.37	
	ϕ16m distribution	32	6.50	208.00	1.58	328.64	

M. A. R. 57
Measure

al No. .....
e of Work ..... From.....
e of Contractor of nature of Agency .....
of commencement of work .....

Full description, etc, of work	Number	Le
Deck 6	3	
ϕ16m dia cr ms	33	4
ϕ16m dia St ms	33	3
ϕ16m distribution	32	8
Deck 7		
ϕ16m dia cr ms	22	
ϕ16m dia St ms	22	
ϕ16m distribution ms	32	
Deck 8		
ϕ16m dia cr ms	22	
ϕ16m dia St ms	22	
ϕ16m dia distribution	32	

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ASUREMENT BOOK

Number	Length	Breadth	Depth	Contents	Reference to last Measurement
3	4	5	6	7	8
32	8·00	258·00	1·58	404·48	
25	4·35	108·75	1·58	171·82	
25	3·90	97·50	1·58	154·05	
32	6·00	192·00	1·58	303·36	
25	4·35	126·15	1·58	199·31	
25	3·90	113·10	1·58	178·69	
32	7·00	224·00	1·58	353·92	
22	4·35	117·45	1·58	185·57	
22	3·90	105·30	1·58	166·37	
32	6·50	208·00	1·58	328·64	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 415283

Serial No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Date	Full description, etc, of work	Number	Length	Breadth	Depth	Contents	Reference to last Measurement
1	Deck 6	3	4	5	6	7	8
	ϕ16mm dia C/sink	33	4·35	143·55	1·58	226·80	
	ϕ16mm dia Sh/sink	33	3·90	128·70	1·58	203·34	
	ϕ6mm dia tube	32	8·00	258·00	1·58	404·48	
	Deck 7						
	ϕ16mm dia C/sink	22	4·35	95·70	1·58	151·20	
	ϕ16mm dia Sh/sink	22	3·90	85·80	1·58	135·57	
	ϕ16mm dia tube	32	5·50	176·00	1·58	278·08	
	Deck 8						
	ϕ16mm dia C/sink	22	4·35	95·70	1·58	151·20	
	ϕ16mm dia Sh/sink	22	3·90	85·80	1·58	135·57	
	ϕ16mm dia tube	32	5·50	176·00	1·58	278·08	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Deem 9						
	Φ16mm dia Cmd rod	22	4.31	9.20	1.58	157.06	
	Φ16mm dia St rod	22	3.90	85.80	1.58	135.56	
	Φ16mm dia Stirrup	32	5.25	168.00	1.58	265.44	
				Say	557.50	557.50 Kg	
				Total	5.32750		
				Quantity	5.27 Qtl		
						31/5/2016	

M. A. R. 57
Measurer

al No. .....
e of Work ..... From.....
e of Contractor of nature of Agency .....
of commencement of work .....

Full description, etc, of work	Number	Le
2	3	

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